

North Carolina Department of Crime Control and Public Safety
Division of State Highway Patrol

James B. Hunt Jr., Governor
Richard H. Moore, Secretary

E. W. Horton, Colonel

March 17, 1998

Ms. Kelly Gage
Guilford County Emergency Services
P.O. Box 18807
Greensboro, NC 27419

RE: NC Highway Patrol
2527 E. Market Street
Greensboro, NC 27401

Dear Ms. Gage:

Enclosed is the tank closure report for the subject site. On February 24, 1998, a 10,000 gallon gasoline tank was removed and replaced with a new tank. Six soil samples collected from the pit bottom and along the product line were found to be clean. Based on these results, no further action is recommended. If you have questions, please call Mr. Ronald Faison at (919) 733-7956 or myself at (919) 733-2220.

Sincerely,

A handwritten signature in cursive script, appearing to read "Eric Motzno".

Eric Motzno, L.G.
Hydrogeologist

encl

cc: Ronald H. Faison
Highway Patrol

TANK CLOSURE REPORT
HIGHWAY PATROL STATION
2527 EAST MARKET STREET
GREENSBORO, NORTH CAROLINA

BY

ERIC MOTZNO, L.G.
HYDROGEOLOGIST

MARCH 17, 1998

TABLE OF CONTENTS

I.	GENERAL INFORMATION.	1
II.	CLOSURE PROCEDURES .	2
III.	SITE INVESTIGATION .	2
IV.	CONCLUSIONS AND RECOMMENDATIONS .	2
V.	CERTIFICATION .	3

FIGURES

APPENDICES

TANK CLOSURE REPORT
HIGHWAY PATROL STATION
2527 EAST MARKET STREET
GREENSBORO, GUILFORD COUNTY

I. GENERAL INFORMATION

The owner of the former gasoline tank is listed in the UST database is CC & PS, State Highway Patrol, 1300 Blue Ridge Road, Raleigh, NC 27607. The phone number for this office is (919) 733-7956. The facility (0-021407) is listed in the UST database as NC Highway Patrol, located on 2527 East Market Street, Greensboro, NC 27401 (See Figure 1). The phone number for the facility is (910) 334-5621.

The contact person for the Highway Patrol is Mr. Ronald H. Faison, Equipment Superintendent and can be reached at the owner's address and phone. The closure contractor was EnviroTech Petroleum Co., 445 North Louisiana Avenue., Box 8, Asheville, NC 28806. EnviroTech's phone number is (704) 259-9435. The laboratory analyses were provided by Chemical and Environmental Technology, (CET) P.O. Box 12298, Research Triangle Park, NC 27709 and can be reached at (919) 467-3090. This information was reported to the Division of Water Quality, Winston-Salem Regional Office on November 19, 1997. A copy of this form is found in Appendix A.

The former tank was installed approximately 10 years ago and was used until it was abandoned during closure activities on February 24, 1998. This was a steel UST measuring approximately 8' by 26.5' and held 10,000 gallons of gasoline used to fuel Highway Patrol cars. This tank was registered with Groundwater Section in 1986 and all UST fees were paid prior to abandonment.

There are no known instances of past releases of gasoline at this site. After the old tank was removed, a new 10,000 gallon UST was installed in the same pit, therefore, the facility is still active. The surrounding area is an urban area consisting of a cigarette factory, light industry, and a residential neighborhood. The area is served by a public water system.

According to the Geologic Map of North Carolina, 1985, the area surrounding the site is in the Metamorphosed Granitic formation of the Carolina Slate Belt. The top of the surficial aquifer is unknown, but is predicted at approximately 30 feet below surface.

II. CLOSURE PROCEDURE

In November 1997, the Division of Water Quality was notified of the tank closure when form UST-3 was submitted. Since field activities are now complete, a Form UST-2 Site Investigation Report For Permanent Closure has been completed and is submitted in Appendix B. EnviroTech proceeded with the tank closure by removing all liquid and explosive levels of vapors. Soil was excavated until the tank could be lifted out. The tank was visually inspected for holes and none were noted. Since a new tank was being installed in the same pit, the pit was not immediately backfilled. The pit dimensions were 12' by 30' and 13 feet deep. EnviroTech has provided a Certificate of Tank Disposal and is found in Appendix C. The top of the tank was approximately 5 feet below surface. The soil was a loamy, coarse sand.

III. SITE INVESTIGATION

Three soil samples were collected along the centerline of the tank pit on February 24, 1998. The location of each sample is shown in Figure 2 as well as the location of the tank and product line. These samples were placed in jars provided by the lab and placed on ice until delivery to the lab. The bottom of the pit was approximately 13 feet below grade and the samples were collected 1-2 feet below the pit floor for a total depth of 14-15 feet. The samples were labeled SS1, SS2 and SS3.

Three other soil samples were collected at 10 foot intervals along the product line to the dispenser. These samples were labeled SS4, SS5, and SS6 and were collected at a depth of 3 feet. All samples were submitted to Chemical and Environmental Technology with a site name of Greensboro Highway Patrol. The analysis requested was Method 5030. The Final Report of Analyses, dated March 10, 1998 from CET, shows the samples were clean with no detection of Total Petroleum Hydrocarbons. These results are found in Appendix D.

Groundwater was not encountered during tank removal, therefore, no water samples were collected or submitted. Since contamination was not detected, a Site Sensitivity Evaluation form was not completed or submitted.

IV. CONCLUSIONS AND RECOMMENDATIONS

No contamination was shown in the lab analyses, therefore, no further investigation or action is recommended. This report will be kept on file for a minimum of three years in this office.

V. CERTIFICATION

In accordance with Title 15A, NCAC, 2N .0803, this report was prepared using the best available information at the time of the report preparation. This report follows the format of the GW/UST-12 form, therefore, a UST-12 was not included.



Eric Motzno, L.G.
Hydrogeologist

FIGURES

NC Highway Patrol
2527 E. Market Street
Greensboro, NC

Figure 1.

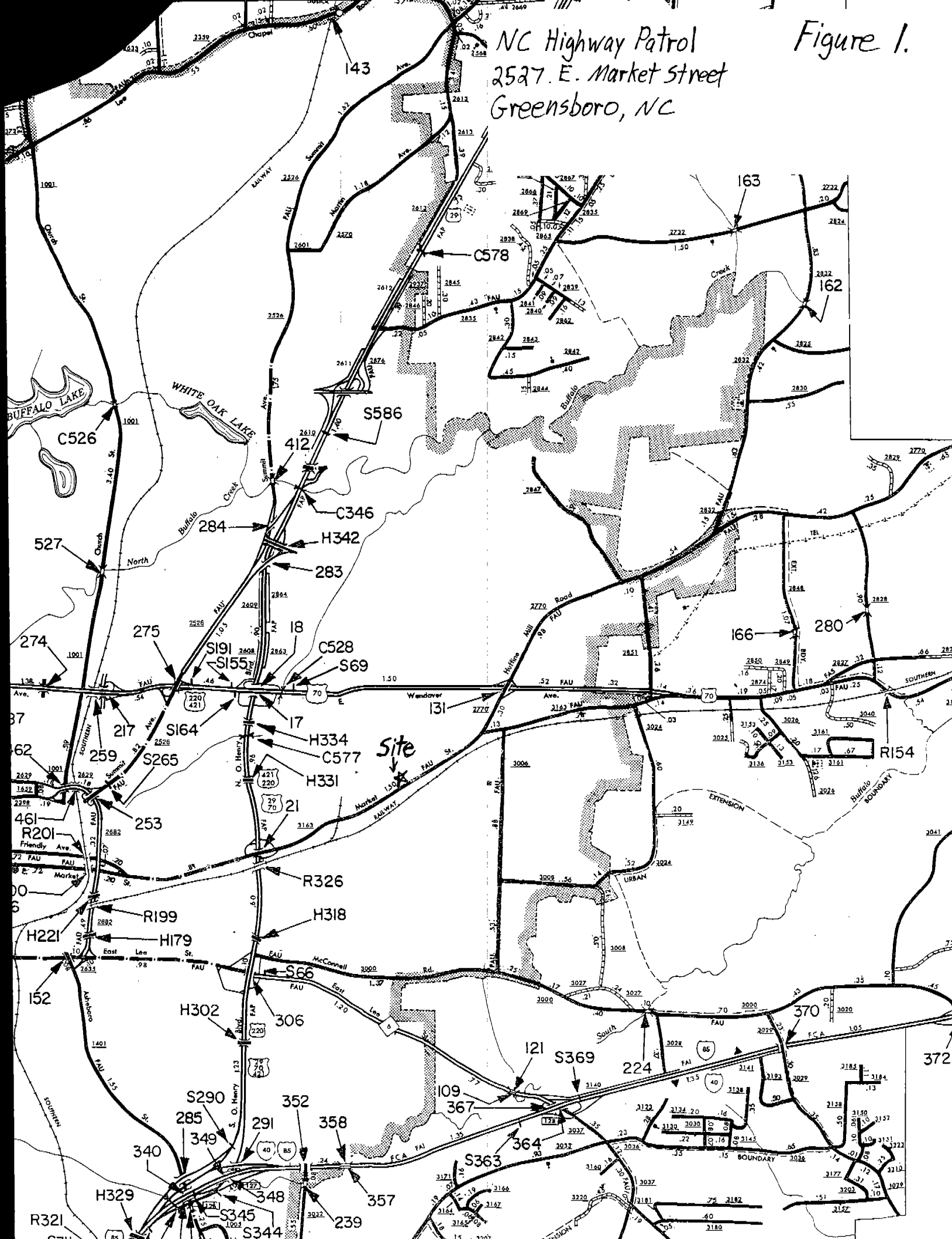
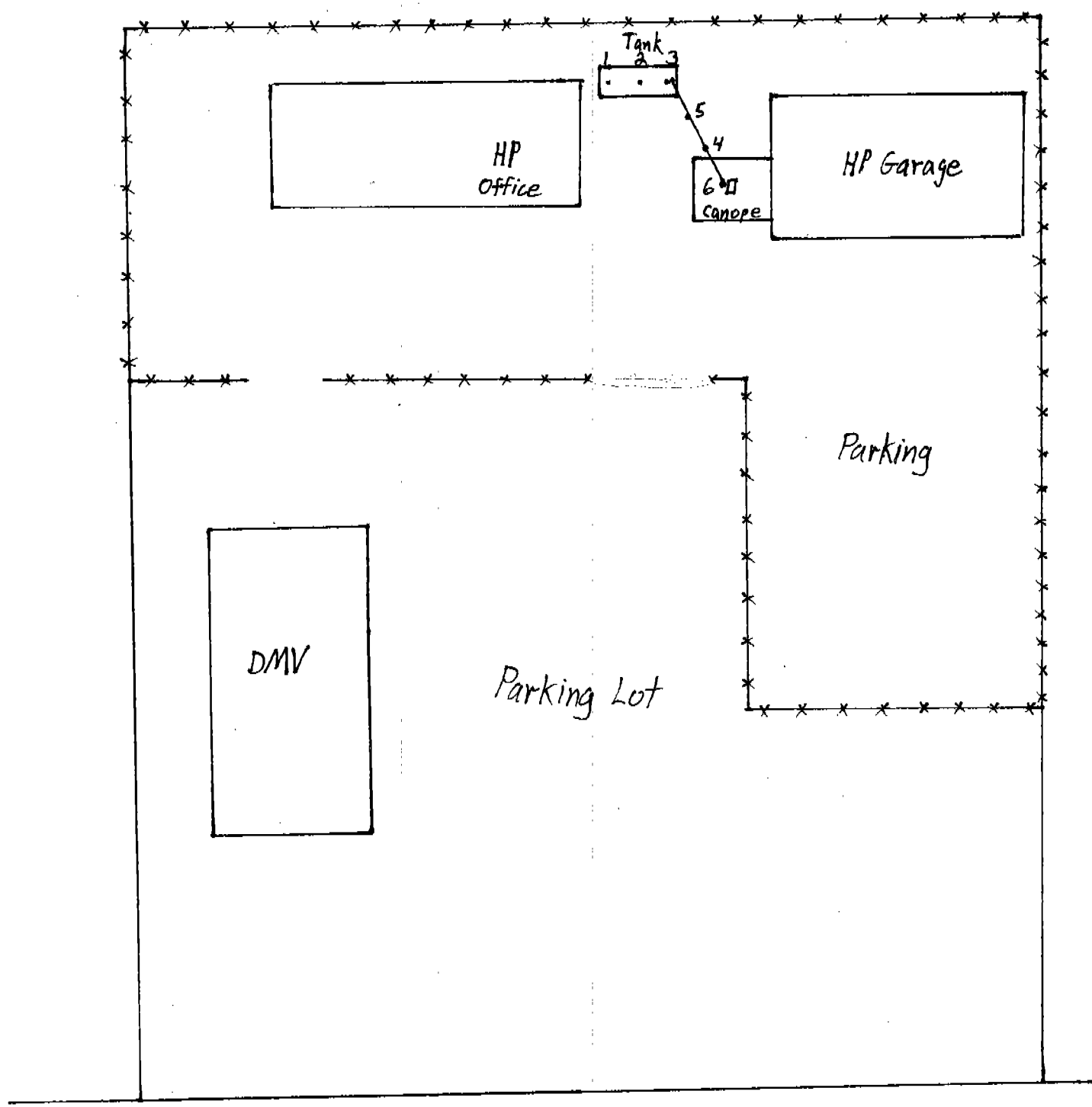
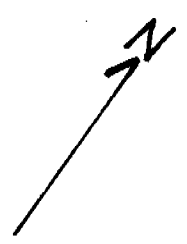


Figure 2.

N.C. Highway Patrol
2527 East Market Street
Greensboro, NC 27401



Market Street



Scale 1" \approx 45'

APPENDIX A

UST-3

Notice of Intent: UST Permanent Closure or Change-In-Service

FOR
TANKS
IN
NC

Return Completed Form To:

The appropriate DEM Regional Office according to the county of the facility's location. [SEE REVERSE SIDE OF OWNER'S COPY (PINK) FOR REGIONAL OFFICE ADDRESS].

State Use Only

I. D. Number _____

Date Received _____

INSTRUCTIONS

Complete and return five (5) working days prior to closure or change-in-service.

I. OWNERSHIP OF TANK(S)

Tank Owner Name: CC&PS, State Highway Patrol

(Corporation, Individual, Public Agency, or Other Entity)

Street Address: 1500 Blue Ridge RoadCounty: WakeCity: Raleigh State: N.C. Zip Code: 27607Tele. No. (Area Code): 919-733-7956

II. LOCATION OF TANK(S)

Facility Name or Company: N.C. Highway PatrolFacility ID # (if available): 0-021407Street Address or State Road: 2527 E. Market StreetCounty: Guilford City: Greensboro Zip Code: 27401Tele. No. (Area Code): 910-334-5621

III. CONTACT PERSON

Name: Ronald H. Faison Job Title: Equipment Supt. Telephone Number: (919) 733-7956

IV. TANK REMOVAL, CLOSURE IN PLACE, CHANGE-IN-SERVICE

1. Contact Local Fire Marshall.
2. Plan the entire closure event.
3. Conduct Site Soil Assessments.
4. If Removing Tanks or Closing in Place refer to API Publications 2015 "Cleaning Petroleum Storage Tanks" & 1604 "Removal & Disposal of Used
5. Provide a sketch locating piping, tanks and soil sampling locations.
6. Fill out form GW/UST-2 "Site Investigation Report for Permanent Closure" and return within 30 days following the site investigation.
7. The site assessment portion of the tank closure must be conducted under the supervision of a Professional Engineer or Licensed Geologist. After January 1, 1994, all closure site assessment reports must be signed and sealed by a P.E. or L.G.
8. Keep closure records for 3 years.

V. WORK TO BE PERFORMED BY:

(Contractor) Name: Contract in Bid Process

Address: _____ State: _____ Zip Code: _____

Contact: _____ Phone: _____

Primary Consultant: _____ Phone: _____

VI. TANK(S) SCHEDULED FOR CLOSURE OR CHANGE-IN-SERVICE

TANK ID#	TANK CAPACITY	LAST CONTENTS	PROPOSED ACTIVITY		
			CLOSURE		CHANGE-IN-SERVICE
			Removal	Abandonment In Place	New Contents Stored
<u>1</u>	<u>10,000</u>	<u>Unleaded Gasoline</u>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

VII. OWNER OR OWNER'S AUTHORIZED REPRESENTATIVE

Print name and official title

Ronald H. Faison Equipment Superintendent*Scheduled Removal Date: 1-15-98

Signature: _____

Ronald H. FaisonDate Submitted: 11-19-97

*If scheduled work date changes, notify your appropriate DEM Regional Office 48 hours prior to originally scheduled date.

APPENDIX B

FOR
TANKS
IN
NC

Return Completed Form To:

The appropriate DWQ Regional Office according to the county of the facility's location.
[SEE MAP ON REVERSE SIDE OF OWNER'S COPY (PINK) FOR REGIONAL
OFFICE ADDRESS].

State Use Only

I.D. Number _____

Date Received _____

INSTRUCTIONS

Complete and return within (30) days following completion of site investigation.

I. Ownership of Tank(s)

Owner Name: State Highway Patrol
 Corporation, Individual, Public Agency, or Other Entity
 Street Address: 1300 Blue Ridge Road
 County: Wake
 City: Raleigh State: NC Zip Code: 27607
 Telephone Number: (919) 733-7956
 (Area Code)

II. Location of Tank(s)

Facility Name: _____
 (or Company)
 Facility ID # (if available): _____
 Street Address: 2527 East Market Street
 (or State Road)
 County: Guilford City: Greensboro Zip Code: 27600
 Telephone Number: (_____) _____
 (Area Code)

III. Contact Person

Name: Ronald H. Eason Job Title: Equipment Superintendent Tel. No.: 919 733 7956
 Closure Contractor: EnviroTech Petroleum Co Address: 445 Louisiana Ave, Asheville NC 28806 Tel. No.: 704 259 9435
 Primary Consultant: _____ Address: _____ Tel. No.: _____
 Lab: Chemical + Environmental Technology Address: P.O. Box 12298, RTP, NC 27709 Tel. No.: 919 467 3090

IV. U.S.T. Information

Tank No.	Size in Gallons	Tank Dimensions	Last Contents	Water In Excavation		Free Product		Notable Odor or Visible Soil Contamination	
				Yes	No	Yes	No	Yes	No
			<u>Gasoline</u>		<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>		

VI. Additional Information Required

See reverse side of pink copy (owner's copy) for additional information required by N.C. - DWQ in the written report and sketch.

NOTE: If a release from the tank(s) has occurred, the site assessment portion of the tank closure must be conducted under the supervision of a P.E. or L.G., with all closure site assessment reports bearing the signature and seal of the P.E. or L.G.

VII. Check List (Check the activities completed)

PERMANENT CLOSURE (For Removing or Abandoning-in-place)

- ☒ Contact local fire marshal.
☒ Notify DWQ Regional Office before abandonment.
☒ Drain & flush piping into tank.
☒ Remove all product and residuals from tank.
☒ Excavate down to tank.
☒ Clean and inspect tank.
☒ Remove drop tube, fill pipe, gauge pipe, vapor recovery tank connections, submersible pumps and other tank fixtures.
☒ Cap or plug all lines except the vent and fill lines.
☒ Purge tank of all product & flammable vapors.
☐ Cut one or more large holes in the tanks.
☐ Backfill the area.
 Date Tank(s) Permanently closed: 2-24-98
 Date of Change-in-Service: _____

ABANDONMENT IN PLACE

- ☐ Fill tank until material overflows tank opening.
☐ Plug or cap all openings.
☐ Disconnect and cap or remove vent line.
☐ Solid inert material used - specify: _____

REMOVAL

- ☒ Create vent hole.
☒ Label tank.
☒ Dispose of tank in approved manner.
 Final tank destination: _____

VIII. Certification (Read and Sign)

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this and all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete.

Print name and official title of owner or owner's authorized representative

Eric Motzno, Hydrogeologist

Signature

Eric Motzno

Date Signed

3-15-98

APPENDIX C

Tank Disposal Manifest

Owner of UST (s): NC State Highway Patrol

Address: 2527 East Market Street

Greensboro, N.C. 27401

Size of Tank (s): (1) 10,000 Gallon

Tank ID#: 015

Date of Removal: 2-24-97

Date of Disposal: 2-26-97

Removal and Disposal Performed By:

Enviro-Tech Petroleum Construction Co., Inc.

441 North Louisiana Plaza Suite A

Asheville, N.C. 28806

(704) 259-9435

Disposal Comments: The Tanks were Vented per all State and Federal Guidelines and cut-up into Scrap Metal



APPENDIX D

CHEMICAL & ENVIRONMENTAL TECHNOLOGY, INC.

ENVIRONMENTAL ANALYTICAL SERVICES

FINAL REPORT OF ANALYSES

NC DOT
4809 BERYL ROAD
RALEIGH, NC 27606
Attn: KIM BEARD

REPORT DATE: 03/10/98

2.001900

SAMPLE NUMBER- 142182 SAMPLE ID- SS1
DATE SAMPLED- 02/24/98
DATE RECEIVED- 02/24/98 SAMPLER- KIM BEARD
TIME RECEIVED- 1558 DELIVERED BY- KIM BEARD

SAMPLE MATRIX- SO
TIME SAMPLED- 1300
RECEIVED BY- SLH

Page 1 of 1

PROJECT NAME : 2.001900

ANALYSIS	METHOD	ANALYSIS DATE	BY	RESULT UNITS	PQL
PERCENT SOLIDS	2540G	03/02/98	AEK	85.5 NA	
LOW FRACTION HYDROCARBON	5030	03/05/98	JBR	< 0.10 mg/kg	0.10

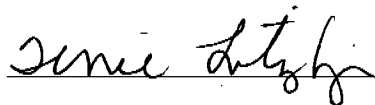
PQL = Practical Quantitation Limit

Results followed by the letter J are estimated concentrations.

All results for soil and sludge samples are reported on a dry weight basis as required by the NC DEM Laboratory Certification Section. Wet Weight Concentration = (dry weight conc.)(percent solids)/100.

NC DEHNR CERTIFICATIONS: DWQ - 96; PUBLIC WATER SUPPLY - 37724

LABORATORY DIRECTOR



CHEMICAL & ENVIRONMENTAL TECHNOLOGY, INC.

ENVIRONMENTAL ANALYTICAL SERVICES

FINAL REPORT OF ANALYSES

NC DOT
4809 BERYL ROAD
RALEIGH, NC 27606
Attn: KIM BEARD

REPORT DATE: 03/10/98

2.001900

SAMPLE NUMBER- 142183 SAMPLE ID- SS2
DATE SAMPLED- 02/24/98
DATE RECEIVED- 02/24/98 SAMPLER- KIM BEARD
TIME RECEIVED- 1558 DELIVERED BY- KIM BEARD

SAMPLE MATRIX- SO
TIME SAMPLED- 1300
RECEIVED BY- SLH

Page 1 of 1

PROJECT NAME : 2.001900

ANALYSIS	METHOD	ANALYSIS DATE	BY	RESULT UNITS	PQL
PERCENT SOLIDS	2540G	03/02/98	AEK	77.0 NA	
LOW FRACTION HYDROCARBON	5030	03/05/98	JBR	< 0.10 mg/kg	0.10

PQL = Practical Quantitation Limit

Results followed by the letter J are estimated concentrations.

All results for soil and sludge samples are reported on a dry weight basis as required by the NC DEM Laboratory Certification Section. Wet Weight Concentration = (dry weight conc.)(percent solids)/100.

NC DEHNR CERTIFICATIONS: DWQ - 96; PUBLIC WATER SUPPLY - 37724

LABORATORY DIRECTOR



CHEMICAL & ENVIRONMENTAL TECHNOLOGY, INC.

ENVIRONMENTAL ANALYTICAL SERVICES

FINAL REPORT OF ANALYSES

NC DOT
4809 BERYL ROAD
RALEIGH, NC 27606
Attn: KIM BEARD

REPORT DATE: 03/10/98

2.001900

SAMPLE NUMBER- 142184 SAMPLE ID- SS3
DATE SAMPLED- 02/24/98
DATE RECEIVED- 02/24/98 SAMPLER- KIM BEARD
TIME RECEIVED- 1558 DELIVERED BY- KIM BEARD

SAMPLE MATRIX- SO
TIME SAMPLED- 1300
RECEIVED BY- SLH

Page 1 of 1

PROJECT NAME : 2.001900

ANALYSIS	METHOD	ANALYSIS DATE	BY	RESULT UNITS	PQL
PERCENT SOLIDS	2540G	03/02/98	AEK	84.0 NA	
LOW FRACTION HYDROCARBON	5030	03/05/98	JBR	< 0.10 mg/kg	0.10

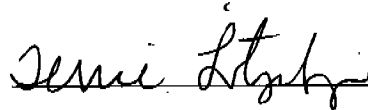
PQL = Practical Quantitation Limit

Results followed by the letter J are estimated concentrations.

All results for soil and sludge samples are reported on a dry weight basis as required by the NC DEM Laboratory Certification Section. Wet Weight Concentration = (dry weight conc.)(percent solids)/100.

NC DEHNR CERTIFICATIONS: DWQ - 96; PUBLIC WATER SUPPLY - 37724

LABORATORY DIRECTOR



CHEMICAL & ENVIRONMENTAL TECHNOLOGY, INC.

ENVIRONMENTAL ANALYTICAL SERVICES

FINAL REPORT OF ANALYSES

NC DOT
4809 BERYL ROAD
RALEIGH, NC 27606
Attn: KIM BEARD

REPORT DATE: 03/10/98

2.001900

SAMPLE NUMBER- 142185 SAMPLE ID- SS4
DATE SAMPLED- 02/24/98
DATE RECEIVED- 02/24/98 SAMPLER- KIM BEARD
TIME RECEIVED- 1558 DELIVERED BY- KIM BEARD

SAMPLE MATRIX- SO
TIME SAMPLED- 1300
RECEIVED BY- SLH

Page 1 of 1

PROJECT NAME : 2.001900

ANALYSIS	METHOD	ANALYSIS DATE	BY	RESULT UNITS	PQL
PERCENT SOLIDS	2540G	03/02/98	AEK	80.6 NA	
LOW FRACTION HYDROCARBON	5030	03/05/98	JBR	< 0.10 mg/kg	0.10

PQL = Practical Quantitation Limit

Results followed by the letter J are estimated concentrations.

All results for soil and sludge samples are reported on a dry weight basis as required by the NC DEM Laboratory Certification Section. Wet Weight Concentration = (dry weight conc.)(percent solids)/100.

NC DEHNR CERTIFICATIONS: DWQ - 96; PUBLIC WATER SUPPLY - 37724

LABORATORY DIRECTOR



CHEMICAL & ENVIRONMENTAL TECHNOLOGY, INC.

ENVIRONMENTAL ANALYTICAL SERVICES

FINAL REPORT OF ANALYSES

NC DOT
4809 BERYL ROAD
RALEIGH, NC 27606
Attn: KIM BEARD

REPORT DATE: 03/10/98

2.001900

SAMPLE NUMBER- 142186 SAMPLE ID- SS5
DATE SAMPLED- 02/24/98
DATE RECEIVED- 02/24/98 SAMPLER- KIM BEARD
TIME RECEIVED- 1558 DELIVERED BY- KIM BEARD

SAMPLE MATRIX- SO
TIME SAMPLED- 1300
RECEIVED BY- SLH

Page 1 of 1

PROJECT NAME : 2.001900

ANALYSIS	METHOD	ANALYSIS DATE	BY	RESULT UNITS	PQL
PERCENT SOLIDS	2540G	03/02/98	AEK	73.6 NA	
LOW FRACTION HYDROCARBON	5030	03/05/98	JBR	< 0.10 mg/kg	0.10

PQL = Practical Quantitation Limit

Results followed by the letter J are estimated concentrations.

All results for soil and sludge samples are reported on a dry weight basis as required by the NC DEM Laboratory Certification Section. Wet Weight Concentration = (dry weight conc.)(percent solids)/100.

NC DEHNR CERTIFICATIONS: DWQ - 96; PUBLIC WATER SUPPLY - 37724

LABORATORY DIRECTOR

Janie Lutzberger

CHEMICAL & ENVIRONMENTAL TECHNOLOGY, INC.

ENVIRONMENTAL ANALYTICAL SERVICES

FINAL REPORT OF ANALYSES

NC DOT
4809 BERYL ROAD
RALEIGH, NC 27606
Attn: KIM BEARD

REPORT DATE: 03/10/98

2.001900

SAMPLE NUMBER- 142187 SAMPLE ID- SS6
DATE SAMPLED- 02/24/98
DATE RECEIVED- 02/24/98 SAMPLER- KIM BEARD
TIME RECEIVED- 1558 DELIVERED BY- KIM BEARD

SAMPLE MATRIX- SO
TIME SAMPLED- 1300
RECEIVED BY- SLH

Page 1 of 1

PROJECT NAME : 2.001900

ANALYSIS	METHOD	ANALYSIS DATE	BY	RESULT UNITS	PQL
PERCENT SOLIDS	2540G	03/02/98	AEK	84.1 NA	
LOW FRACTION HYDROCARBON	5030	03/09/98	JBR	< 0.10 mg/kg	0.10

PQL = Practical Quantitation Limit

Results followed by the letter J are estimated concentrations.

All results for soil and sludge samples are reported on a dry weight basis as required by the NC DEM Laboratory Certification Section. Wet Weight Concentration = (dry weight conc.)(percent solids)/100.

NC DEHNR CERTIFICATIONS: DWQ - 96; PUBLIC WATER SUPPLY - 37724

LABORATORY DIRECTOR

Terrie Fitzberger

(919) 467-3090 FAX: (919) 467-3515

CLIENT NAME: NE DOT		Turnaround Time: <input checked="" type="checkbox"/> Normal (2 weeks) <input type="checkbox"/> Rush (1 week)* <input type="checkbox"/> Rush (48 hours)* <input type="checkbox"/> Rush (24 hours)*												
ADDRESS: 4809 Beryl Rd.														
RAC NE 27606														
ATTENTION: Kim Beard		PHONE: FAX:												
PROJECT NO: 2.001902	PROJECT NAME: G'BOBO HWY PATROL (GREENSBORO)	PRINTED NAME: Kim Beard												
COLLECTED BY: (Signature) <i>Kim Beard</i>														
CET SAMPLE #	DATE	TIME	SAMPLE TYPE COM GRAB	SAMPLE I.D.	SAMPLE MATRIX	# OF CONTAINERS	PRESERVED IN FIELD	PRESERVED IN LAB	RECEIVED ON ICE	REMARKS	PURCHASE ORDER NO:	BILL TO:		
SS1	2/24/98	1:00 pm	✓	Soil Sample	1	S	1	✓		142182				
2					2			✓		142183				
3					3			✓		142184				
4					4			✓		142185				
5					5			✓		142186				
6					6			✓		142187				
RELINQUISHED BY (Signature) <i>W. Beard</i> DATE 2/24/98 TIME 3:58 pm RECEIVED BY (Signature) <i>Deane DeWing</i>												DATE 2/24/98 TIME 3:58	ADDITIONAL INSTRUCTIONS:	
RELINQUISHED BY (Signature)												DATE	TIME	RECEIVED BY (Signature)

METHOD REFERENCES

Federal Register, Vol. 59, 40 CFR Part 136.3, January 31, 1994

--Metals, Inorganics, and Organics for groundwater and wastewater

Federal Register, Vol. 56, 40 CFR Parts 141-143, January 30, 1991

--Metals, Inorganics, and Organics for drinking water

"Groundwater Section Guidelines for the Investigation and Remediation of Soils and Groundwater", NCDEHNR, DEM, March 1993.

--High Fraction Hydrocarbon and Low Fraction Hydrocarbon for groundwater and soil

SW-846, Third Edition, Revision I, July 1992

--Inorganics and Organics in soil or sludges. Metals in soil, sludge, or groundwater.
(Metals in groundwater are digested by **Method 3030C, Standard Methods, 18th Edition**)

40 CFR Part 261, Appendix II and III

--Toxic Characteristic Leaching Procedure

Standard Methods, 18th Edition, 1992

--Total and Fecal Coliform in wastewater, streams, and lakes